HIV/AIDS and admission to intensive care units: A comparison of India, Brazil and South Africa

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In resource-constrained settings and in the context of HIV-infected patients requiring intensive care, value-laden decisions by critical care specialists are often made in the absence of explicit policies and guidelines. These are often based on individual practitioners' knowledge and experience, which may be subject to bias. We reviewed published information on legislation and practices related to intensive care unit (ICU) admission in India, Brazil and South Africa, to assess access to critical care services in the context of HIV. Each of these countries has legal instruments in place to provide their citizens with health services, but they differ in their provision of ICU care for HIV-infected persons. In Brazil, some ICUs have no admission criteria, and this decision vests solely on the 'availability, and the knowledge and the experience' of the most experienced ICU specialist at the institution. India has few regulatory mechanisms to ensure ICU care for critically ill patients including HIV-infected persons. SA has made concerted efforts towards non-discriminatory criteria for ICU admissions and, despite the shortage of ICU beds, HIV-infected patients have relatively greater access to this level of care than in other developing countries in Africa, such as Botswana. Policymakers and clinicians should devise explicit policy frameworks to govern ICU admissions in the context of HIV status.

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People living with HIV/AIDS (PLWHA) often become ill due to opportunistic infections such as *Pneumocystis jeroveci* pneumonia, necessitating hospitalisation and admission to intensive care units (ICUs). Resources allocated to specialised care in developing countries seldom match their demand, resulting in decisions having to be made about who benefits from treatment and who does not.[1] In resource-constrained countries, these value-laden decisions by critical care specialists are often made in the absence of explicit policies and guidelines, and are based on individual knowledge and experience, which may be subject to bias. In South Africa the general criteria for ICU admission in the public sector include whether the patient is 'too well or too ill', and whether there is a realistic prospect of 'reversibility of organ dysfunction'. This policy is equally applicable to PLWHA who require ICU admission.

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According to the 2012 UNAIDS Global Aids Report, the BRICS countries – Brazil, Russia, India, China and South Africa – increased domestic public spending on HIV by more than 120% between 2006 and 2011. These countries currently fund, on average, more than 75% of their domestic AIDS responses and have dealt with the HIV pandemic with varying levels of success.[2] The three countries reviewed face similar problems regarding resource constraints and the numbers of available ICU beds (Table 1). India is notable in that ICU care in the country is very limited, inaccessible and unaffordable to many citizens.[3]

The Constitutional right to intensive care for PLWHA

The Constitutions of Brazil, India and South Africa enshrine a patient's right to healthcare and their right not to be refused access to emergency treatment. Legal precedents to this effect exist in India and South Africa, where this Constitutional right has withstood legal review (Table 2). These case precedents apply equally to PLWHA and access to intensive care.

Table 1. Population to ICU bed ratio according to country

	Brazil	India	USA	South Africa
2012 population	199 million	1.2 billion	313 million	49 million
Number of ICU beds, *N*	25 367	70 000	94 000	5 500
Population : ICU bed ratio	~ 1:8 000	~ 1:14 000	~ 1:4 000	~ 1:10 000

Table 2. The right to healthcare and access to emergency care: Case precedents

Country	Case
India	P Rathnam v. Union of India 1994 (3); Supreme Court cases 394 - 430 Gian Kaur v. State of Punjab 1996 Supreme Court; 83: 12578 - 12564 Paschim Baga Khet Mansoor Samiti v. State of West Bengal; AIR 1996 SC 2426
South Africa	Government of the Republic of South Africa (RSA) and others v. Grootboom and others (judgment: 4 October 2000) Minister of Health and others v. Treatment Action Campaign (TAC) and others (judgment: 5 July 2002) Soobramoney v. Minister of Health (KwaZulu-Natal) 116 Case CCT 32/97 (judgement: 27 November 1997)

Professional ethical guidelines for ICU admission

The medical associations of India, Brazil and South Africa subscribe to the international guidelines of the World Medical Association's Declaration of Geneva, which provide a framework for the appropriate conduct of the medical profession globally.[4] Each country has a professional association that guides and regulates ethical conduct, particularly with regard to PLWHA. These guidelines protect PLWHA against stigmatisation and discrimination by health professionals, particularly with regard to access to healthcare, treatment and support programmes. Similarly, the Siracusa Principles[5] spell out five criteria concerning human rights and restrictions to public health based on resource limitations. The burden of proof still falls on those who want to restrict rights, and concrete scientific and public health evidence is needed, specifically with response to Siracusa Principle 5 which states that 'the restriction of the right of access to public health cannot be unreasonable or discriminatory in its application.'[5]

Lessons to be learnt from Brazil and India

The regulatory and ethical frameworks of Brazil and India provide a useful indication of the varied challenges faced by developing nations regarding PLWHA and their access to ICU care. An important contributor to the success of Brazil's response to the HIV/AIDS epidemic is its National Health Insurance Scheme, which has strengthened its public health system, including ICU bed availability. In Brazil, health services are provided by private-public partnerships, funded by the government and freely accessible to the patient, and extending to specialist and ICU care.[6] It is therefore evident that an HIV-infected patient in Brazil who requires admission to ICU would have easy access to such level of care. The Brazilian Society of Intensive Care[7] speaks of issues of informed consent, the need for comprehensive medical records, humanising the ICUs by improving communication with patients and their families, and establishing ICU admission and discharge criteria in keeping with the 'existing laws and institutional rules'. As such, failure to comply with the provisions under the resolution will be subject to 'civil liability, and administrative and criminal sanctions'.

There is no comprehensive legislation in India addressing HIV/AIDS and criteria for ICU admission. The number of ICU beds available is disproportionately low, in the private and public hospitals, and there is also considerable variation in the allocation and distribution of critical care services across the country, given that 70% of the country is rural.[3,8]

Notwithstanding explicit ICU admission policy at a macro level in South Africa, widespread anecdotal evidence seems to suggest that HIV status may be commonly used as an ICU exclusion criterion. This practice results in arbitrary decision-making and has no prognostic evidentiary basis, rendering such decision-making irrational. Furthermore, it is contrary to SA's legal and human rights policy frameworks.

Given the current state of affairs, policy-makers and clinicians in SA and further afield should devise explicit policy frameworks to govern ICU admissions in the context of HIV status.

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